



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/061,898	02/01/2002	Caroline Sassano Slone	06213 USA	8865

23543 7590 08/12/2003

AIR PRODUCTS AND CHEMICALS, INC.
PATENT DEPARTMENT
7201 HAMILTON BOULEVARD
ALLENTOWN, PA 181951501

EXAMINER

METZMAIER, DANIEL S

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 08/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/061,898

Applicant(s)

SLONE ET AL.

Examiner

Daniel S. Metzmaier

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 1-19, 22 and 37 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20, 21, 25 and 27-36 is/are allowed.
- 6) ☒ Claim(s) 23 and 38-40 is/are rejected.
- 7) ☒ Claim(s) 24 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1-40 are pending in the instant application. This Action is responsive to the amendment filed May 22, 2003, paper No. 5.

Election/Restrictions

1. Applicant's election of Group II, claims 20-37, and example 65 (EDA/4BGE) claims 20-21, 23-28 and 35-36, in Paper No. 5 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Objections

2. Claims 26 and 39 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 26 is indirectly dependent on claim 38, which defines R' as an isobutyl group. Claim 26 defined R' as an alkyl group having 4 to 20 carbon atoms, which is broader than an isobutyl group. Claim 39 is dependent on claim 38 and defines R to include a n-butyl group, which is not an isobutyl group as set forth in claim 38.

Double Patenting

3. Claim 24 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 28. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is

proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim 24 limits R in claim 38 to the isobutyl glycidyl ether groups while claim 28 limits the alkyl glycidyl ether groups to isobutyl groups. Said claims define the same invention.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 23 and 38-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Klimpel et al, US 4,797,202. Klimpel et al (example 1) discloses compounds (table 1, 10th compound down) reading on those claimed added at 50 ppm to a slurry of lime and copper ore having a pH of 11.5 in water. Said composition reads on the claimed aqueous gas scrubbing compositions. The compositions would have been expected to inherently function in the use as a scrubbing composition.

A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The aqueous lime composition having a pH of 11.5 would have functioned as an acid gas scrubbing

Art Unit: 1712

composition. The characterization of the compositions as a gas scrubbing composition does not distinguish the aqueous compositions disclosed in the Klimpel et al reference.

Klimpel et al discloses the empirical structure of the instantly claims substituent R' as H₉C₄-. Since the n-butyl and isobutyl substituents have the same structure and the Klimpel et al makes no distinction there between, it is concluded the Klimpel et al reference disclosure would encompass both the n-butyl and the isobutyl forms.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 23 and 38-40 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kao Corp, JP 2001-107083, as evidenced by applicants' translation and the Japanese Patent Office machine

Art Unit: 1712

translation. The Japanese Patent Office machine translation is referred to hereafter.

Kao Corp (paragraph [003] et seq) discloses detergent compositions that utilize compounds corresponding to the disclosed formula I. Formula I reads on the claimed formula when $m = 1$, $n = 1$ and R1 has a carbon number of 4 to 22.

Kao Corp differs from the claims in the exemplified use of said compounds as a defoamer. Kao Corp (example 2, [0023], [0024], [0025]) exemplifies compounds corresponding to the instantly claimed values of R' = C8 alkyl group, and a degree of adduction of 1.

Kao Corp teaches utilizing the compounds reading on the instantly claimed formula. One having ordinary skill in the art at the time of the invention reading of the Kao Corp reference, would reasonably conclude the compounds would have the same or substantially the same properties as those exemplified.

It would have been obvious to one of ordinary skilled in the art at the time of applicants invention to utilize the Kao Corp disclosed analogous compounds to those exemplified in the Kao Corp reference with a reasonable expectation of the same or

similar properties. The foam control properties in DOSS are interpreted as a physical property of the compounds and would have been expected to have been inherent to the compounds disclosed. Said properties have not been shown to be distinct from the Kao Corp compounds since they are a hydrophobic base and would have been expected to react and/or interact with some of the foaming anionic surfactant making it more hydrophobic.

Allowable Subject Matter

9. Claims 20-21, 25, 27-35 and 36 are allowed.
10. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose or fairly suggest the compounds set forth in claim 36. The prior art does not disclose or fairly suggest the aqueous compositions directed to aqueous acid gas scrubbing compositions employing EDA/4BGE. Claim 20 defines compositions employing compounds having each R defined as $-\text{CH}_2\text{CHOHCH}_2\text{OR}'$, wherein R' is an alkyl group having 1-20 carbon atoms.

Response to Arguments

11. Applicant's arguments filed May 22, 2013 have been fully considered but they are not persuasive.
12. Applicants (page 8) assert because the compounds having n-butyl and iso-butyl group have different defoaming properties, the compositions employing said compounds are unobvious. Applicants refer to Table 1 of the specification. This has not been deemed persuasive since both compounds function as defoamers, the prior art makes no distinction between the two compounds, one skilled in the art would have expected the two compound types to function in similar fashion and said difference has not been asserted to be an unexpected difference. Some variation is to be expected.
13. The rejections over claim 20 and claims dependent thereon have been withdrawn since claim 20 limits the R groups to glycidyl ethers. Claim 38 is rejected and sets forth a breadth relating to that of original claim 20.

Art Unit: 1712

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (703)

308-0451. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson can be reached on (703) 308-2340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Art Unit: 1712

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Daniel S. Metzmaier
Primary Examiner
Art Unit 1712

DSM
August 11, 2003
